

REMARKS

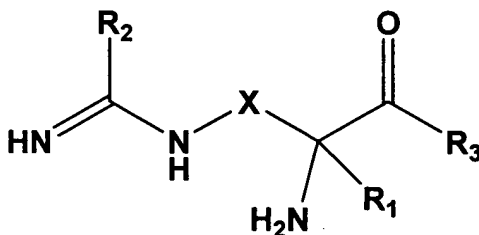
Claims 1-203 are pending. Allowability of claim 202 is acknowledged. Claims 1-201 and 203 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Currie et al., WO 95/25717. Claims 1-201 and 203 stand further rejected under the judicially created doctrine of obviousness-type double patenting over co-pending U.S. application serial number 09/952,888, in view of Currie et al. WO 95/25717.

A. Obviousness under 35 U.S.C. § 103(a)

Claims 1-203 are pending. Allowability of claim 202 is acknowledged. Claims 1-201 and 203 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Currie et al., WO 95/25717. for the following reasons, this rejection is traversed.

I. The meaning of the term "alkylene" in Currie

Currie et al., WO 95/25717, provides the following structure:



The Currie reference states, at page 29, line 27 to page 30, lines 1-4, (Claim 4):

4. The compound as recited in claim 1 wherein
X is an alkylene group having 3 to 5 carbon atoms
and which may optionally be substituted by one or more
C₁₋₃ alkyl; a group of formula -(CH₂)_kQ(CH₂)₁- where k is
2 or 3, 1 is 1 or 2 and Q is O, Se, S(O)_z where z is 0, 1
or 2; or a group of formula -(CH₂)_mA(CH₂)_n- where m is
0, 1 or 2, n is 0, 1 or 2, A is a 3 to 6 membered
carbocyclic or heterocyclic ring;

R₁ is hydrogen (when Q is Se), a hydroxyalkyl group
of 1 to about 4 carbon atoms, a lower alkyl radical of 1

to about 4 carbon atoms;

R_2 is lower alkyl radical of 1 to about 4 carbon atoms; and

R_3 is an amino, alkylamine of 1 to about 4 carbon atoms, hydroxy, lower alkoxy group of 1 to about 4 carbon atoms.

The language of claim 4 is taken directly from the specification of Currie, at page 8, lines 14-32.

It is stated in paper number 11 that the only selection required is to select an alkylene group for X.

The term "alkylene," however, is not defined in Currie et al. Applicants point out that there are at least two meanings of the term "alkylene:" the meaning proposed in paper number 10 (a carbon chain with a double bond); and another definition, that is, a saturated carbon chain with open valences on each end (for example, methylene). This second definition is the one used in the December 2000 Classification Definitions of the USPTO Manual of Classification, for Class 532, Organic Compounds (pages 532-1 to 532-11). In particular, at page 532-6, it is stated:

ALKYLENE

This term denotes an acyclic carbon or a saturated acyclic carbon chain represented but the formula C_nH_{2n} .

Therefore, there are at least two valid definitions for the term "alkylene."

The Currie reference, taken as a whole, is instructive in how the term "alkylene" should be interpreted. Although the Currie reference does not define the term "alkylene," the term is used in a subgeneric description. The Currie reference then goes on to describe several individual examples, none of which have a double bond in the substituent defined by X. It is therefore suggested that Currie follows the normal course of patent drafting, that is, a generic structure, a subgeneric structure within the larger

generic structure, and examples within the subgeneric structure. One skilled in the art, reading the Currie reference in its entirety, would expect that this convention would be followed, and thus the term “alkylene” should be construed so that it conforms to the examples following the subgeneric description. See MPEP 2144.08.

II. Even if the Disputed Meaning of Alkylene is Disregarded, Currie et al. does not Direct One of Ordinary Skill in the Art to the Instantly Claimed Invention.

Currie et al discloses a large number of potential compounds. The definition of X alone, even in the subgeneric disclosure of Currie et al., is very large:

X is an alkylene group having 3 to 5 carbon atoms and which may optionally be substituted by one or more C₁₋₃ alkyl; a group of formula $-(CH_2)_kQ(CH_2)_1-$ where k is 2 or 3, 1 is 1 or 2 and Q is O, Se, S(O)z where z is 0, 1 or 2; or a group of formula $-(CH_2)_mA(CH_2)_n-$ where m is 0, 1 or 2, n is 0, 1 or 2, A is a 3 to 6 membered carbocyclic or heterocyclic ring; ...
(Currie et al., WO 95/25717 at page 8, lines 14-21, and Claim 4 at page 29, lines 29-35)

Although applicants disagree with the interpretation of the term “alkylene” proposed in paper number 11, for the sake of argument, even if the term “alkylene” is given the meaning of a carbon chain with at least one double bond, the number of compounds available through the definition of X is extraordinarily large.

Even when R₂, R₃ and R₁ are fixed, and the compound is in the “S” configuration, because X may be any of the above groups, there are thousands of compounds encompassed by the definition. There is nothing in the subgeneric definition of Currie et al. that suggests that any of the above groups are more preferred than any other.

Therefore, since X may be a “group of formula $-(CH_2)_kQ(CH_2)_1-$ where k is 2 or 3, 1 is 1 or 2 and Q is O, Se, S(O)z where z is 0, 1 or 2; or a group of formula $-(CH_2)_mA(CH_2)_n-$ where m is 0, 1

or 2, n is 0, 1 or 2, A is a 3 to 6 membered carbocyclic or heterocyclic ring," there are copious compounds available, with no suggestion as to the selection of compounds of the present invention. Nothing in this enormous subgenus would direct one of ordinary skill in the art to the instantly claimed compounds, even under the disputed definition of the term "alkylene." See MPEP 2144.08(A)(4)(a). Only in hindsight, guided by the teachings of the present application, would one skilled in the art be directed to the instantly claimed compounds. It is therefore respectfully requested that the rejection under 35 U.S.C. § 103(a) be withdrawn, and the claims passed to issue.

B. Double Patenting


Claims 1-201 and 203 stand further rejected under the judicially created doctrine of obviousness-type double patenting over co-pending U.S. application serial number 09/952,888, in view of Currie et al. WO 95/25717. Without acquiescing to the propriety of this rejection, applicants submit a terminal disclaimer believed sufficient to obviate this rejection.

C. Conclusion

For all of the foregoing reasons, it is believed that the application is in condition for allowance, and it is respectfully requested that the application be passed to issue.

If the Examiner believes a telephonic interview with Applicant's representative would aid in the prosecution of this application, he is cordially invited to contact Applicant's representative at the below listed number.

Respectfully submitted,



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